

INTERNATIONAL PRELIMINARY EXAMINATION REPORT  
(PCT Article 36 and Rule 70)



Applicant's or agent's file reference 56172WO002	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US 02/16666	International filing date (day/month/year) 28.05.2002	Priority date (day/month/year) 28.05.2002
International Patent Classification (IPC) or both national classification and IPC C09J7/02		
Applicant 3M INNOVATIVE PROPERTIES COMPANY et al.		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.
  - ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of    sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  18.12.2003	Date of completion of this report  22.03.2004
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Engel, S  Telephone No. +49 89 2399-7152  

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/US 02/16666**

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the Receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-31 as originally filed

**Claims, Numbers**

1-16 as originally filed

**Drawings, Sheets**

1-3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).  
*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-16
	No: Claims	
Inventive step (IS)	Yes: Claims	1-16
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-16
	No: Claims	

2. Citations and explanations

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US02/16666

D1: WO 93 03107 A (MINNESOTA MINING & MFG) 18 February 1993 (1993-02-18)

D2: WO 98 38262 A (BENNETT GREGGORY S ;HITSCHMANN GUIDO (DE); LAMON ALAIN (FR); GEORG) 3 September 1998 (1998-09-03) cited in the application

**1 Novelty (Article 33(2) PCT)**

1.1 Present Claims 1 and 16 describe an adhesive tape comprising at least one radiation curable adhesive precursor layer and at least one removable film having recesses on the side which is in contact with said radiation curable adhesive precursor layer, as well as an application method for said adhesive tape.

1.2 D1 in its examples discloses a structure having some similarity to the one of present Claim 1. However, the adhesive layer of D1 does not contain any radiation curable adhesive precursor.

1.3 D2, cited by the applicant in the description, is a state of the art document which appears to be relevant with respect to Method Claim 16. It does describe a radiation curing step of the adhesive. Contrary to Claim 1 however, there are not described any Loss Tangent Value parameters in D2.

1.4 Present Claims 1 and 16 therefore appear to meet the requirements of A.33(2) PCT.

**2 Inventive Step (Article 33(3) PCT)**

2.1 D2 which is considered to represent the closest prior art, describes a radiation curable adhesive layer, optionally next to a support (cf. e.g. claims 1, 6 and 9).

2.2 From this, the subject-matter of Claim 1 differs in that at least one support layer has a structured surface having recesses.

2.3 As shown in the present examples, this differing technical feature can produce a technical effect, namely an improvement in handling properties. Tables 1-3 show reduced Cold Flow / improved Loss Tangent Value for the structures acc. to Claim 1; bond strengths of the cured samples are sufficiently high.

2.4 So the objective problem of the Application can be described as providing an adhesive tape with improved handling in use.

2.5 None of the cited prior art documents point the skilled person towards a solution acc. to Claims 1 and 16. Inventive Step can thus be acknowledged.